V_Net 0-300 Temperature Sensor Module

Part Number: 230-VM-TR-300

Module Configuration Setup:

Module Type: SC_LOWTEMP   **Serial Number:**

Channel Name: _____   **Channel Options:**
V_Net ID: _____
Sensor Type: **Temperature Fahrenheit**   **V_Net Update Rate:**   ____50_____ /second
                                                          Logger Sample Rate: ____50_____ /second
Sensor Scaling: **Module Record Rate:**   ____25_____ /second

   A __1.3551__ will become __32 _____
   B __ 2.1882 _ will become __212 ____

Graph Scaling:

   Min Value __0___ Max Value _300
   Digits Before _3__ Digits After _0___

Sensor Installation:

Select a location to install the temperature sensor element such that the wires connecting the sensor to the V_Net connector module can be routed safely, avoiding heat sources (exhaust manifold) and the high voltage ignition wires.

Install the temperature sensor element into a fluid line or fluid gallery using an 1/8 inch pipe thread adapter.   Be sure to use an appropriate pipe thread sealant to insure no fluid leakage occurs during operation. Tighten securely.

Module Installation:

The V_Net connector module can be inserted at any location in the V_Net cable in your vehicle. Select a location where the connector module can be mounted safely. Avoid mounting near heat sources and high voltage ignition wires. The connector module must be mounted in a location the temperature does not exceed 185 degrees or the module will be damaged.

Route and secure the sensor cable from the module and connect the sensor element. If there is excess cable the cable can be shortened using part# 810-CN-TR2P connector kit. You should complete the installation and verify operation before shortening the cable.

Module Setup:

The module has been factory configured as described in the setup box located at the top of this page. The **V_Net ID** has not been programmed. The V_Net ID must be programmed before the module can be utilized in your system.

THIS MODULE WILL NOT FUNCTION IN A STAND ALONE V_Net SYSTEM YOU MUST HAVE A V50 Record/Playback or DATA LOGGER TO PROGRAM THIS MODULE AS DETAILED BELOW.

Software Setup and Module Configuration

Before you can use this module with V-Net Series data logger you will need to update your Car Configuration File in your PC. To perform this step you will need to connect your data logger to your PC using the units serial interface cable (See your units instruction manual for details). Next start the RacePak DataLink program. If you selected your car configuration file as the default configuration file, the file will be opened and the file tab for the

car configuration file will be selected. If it is not, open your car configuration file by selecting the **Open Car Configuration** menu item located in the **Files** main menu selection.
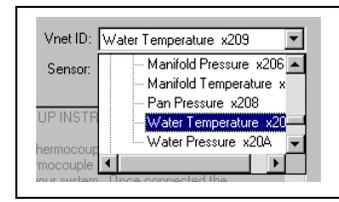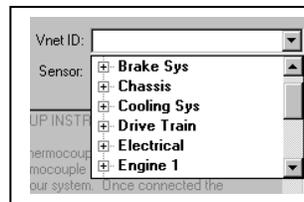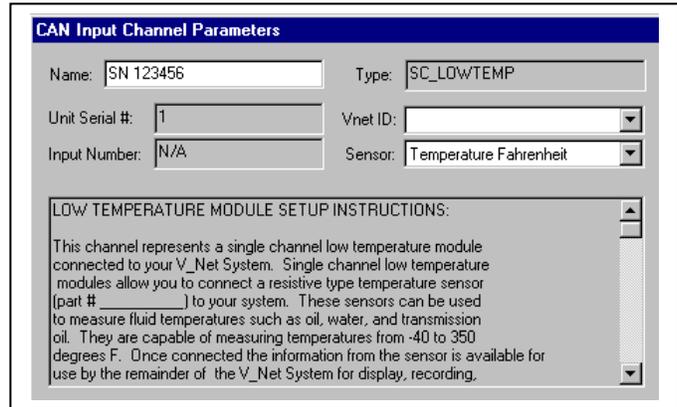
Next apply power to your onboard system, wait 10 seconds and select the **Read VNET Config** menu item located in the **Edit** main menu selection. The DataLink program will read in the configuration of your system. If everything works properly, a new channel button will be added to the configuration file representing this module. The button will be captioned **"SN XXXXX"** where XXXXX represents the serial number of this module.

To edit the setup parameters on this sensor module, position the mouse cursor over the channel button and click the right mouse button. The VNET Input Channel Parameters dialog box will be displayed. A Portion of this dialog box is show below.

Locate the text box labeled **Low Temperature Module Setup Instructions**. This text box provides online instructions for modifying the setup of this module. Read the instructions and modify the setup as desired. (Please note the scroll bars located on the left- hand portion of the text box are used to scroll through the instructions) You must program the **V_Net ID** before the module will function.

CAN Input Channel Parameters

Name: SN 123456   Type: SC_LOWTEMP

Unit Serial #: 1   Vnet ID:

Input Number: N/A   Sensor: Temperature Fahrenheit

LOW TEMPERATURE MODULE SETUP INSTRUCTIONS:

This channel represents a single channel low temperature module connected to your V_Net System. Single channel low temperature modules allow you to connect a resistive type temperature sensor (part # _____) to your system. These sensors can be used to measure fluid temperatures such as oil, water, and transmission oil. They are capable of measuring temperatures from -40 to 350 degrees F. Once connected the information from the sensor is available for use by the remainder of the V_Net System for display, recording,

Programming the V_Net ID:
Every sensor device in your data logger system must be assigned a unique V_Net ID. This ID identifies to the system what the sensor is measuring. For instance engine oil pressure. To set the V_Net ID click on the V_Net ID selection list located above. A list of sensor groups will be displayed as shown to the right. Each group contains an extensive list of parameters associated with that grouping. To open a group click on the plus sign located in front of the group name. The

Vnet ID:
Sensor:
 ⊞ Brake Sys
 ⊞ Chassis
 ⊞ Cooling Sys
 ⊞ Drive Train
 ⊞ Electrical
 ⊞ Engine 1

Vnet ID: Water Temperature x209
Sensor:
 Manifold Pressure x206
 Manifold Temperature x
 Pan Pressure x208
 Water Temperature x20
 Water Pressure x20A

group will be expanded and individual parameters such as water temperature will be listed. Select the parameter that matches you application by clicking on it. The program will load the appropriate default values including the name for the selection. If you wish to modify the name change the name in the name entry box after you have selected the V_Net ID.
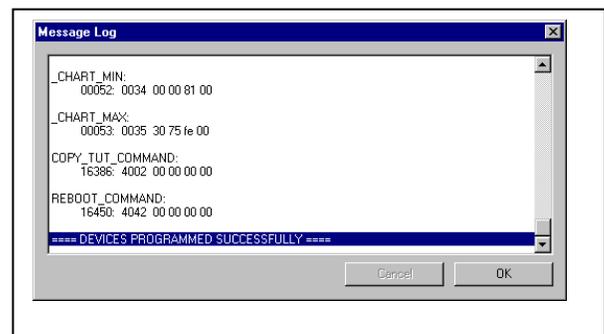
Sending the Configuration to the Module:
When you have finished editing the configuration on your PC, you will need to send the information to the sensor module. Be sure the serial interface cable is connected to your V50 unit or data logger and power is applied to the system. To send the information position the mouse cursor over the **Send Configuration** button and click the left mouse button. The progress box as shown below will be displayed.

SEND Configuration

When finished sending the message "**Device Programmed Successfully**" should be displayed at the bottom of the progress box. If you receive an error message, turn power to the system off and then back on and repeat the send configuration process. If problems persist, check the troubleshooting section in your manual and then contact RacePak.

Message Log

_CHART_MIN:
    00052: 0034 00 00 81 00

_CHART_MAX:
    00053: 0035 30 75 fe 00

COPY_TUT_COMMAND:
    16386: 4002 00 00 00 00

REBOOT_COMMAND:
    16450: 4042 00 00 00 00

==== DEVICES PROGRAMMED SUCCESSFULLY ====

Cancel   OK

Save your configuration file Update the Module Configuration Setup Box on the front of this worksheet with the new setup configuration.

IMPORTANT:
Save this Installation Worksheet in your System Manual in Appendix XXX. This worksheet is part of your system documentation. You may need this worksheet when modifying or trouble shooting your system.